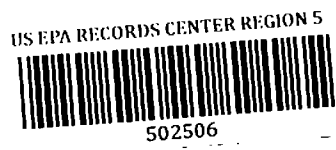


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**BOARD OF PUBLIC WORKS  
OF THE COUNTY OF KENT**  
1500 Scribner Ave., N.W. Grand Rapids, Michigan 49504  
Telephone: (616) 774-3694

Tuesday,  
November 11th, 1977  
October

Mr. Fred Kellow, Chief  
Resource Recovery Division  
Environmental Protection Bureau  
Department of Natural Resources  
Secondary Complex  
Box 30028  
Lansing, Michigan 48909



REFERENCE: Kent County Refuse Disposal System  
Ten Mile Road Landfill Cells 16, 18, 20

Dear Mr. Kellow:

On October 7th, 1977 we discussed the County's desire to proceed with filling the subject cells. At that time you requested that I provide you with more information regarding these cells. The following information is submitted for your information.

1. Cell 16 was dug the early part of this summer, and at that time we had encountered some perched water in this cell. We have let the cell bleed all summer long, and recently we rented a crane and constructed an underdrain along the longitudinal centerline of the cell. This underdrain was four inches in diameter, and an average depth of 3½ feet. During construction we encountered in the westerly 2/3 of this short cell solid clay, and the soil at the upstream end of the cell was sand. Because flow was low enough, the underdrainage system has been tied into the collection system. On top of the cell surface we placed approximately three feet of sand cushion, and on top of the sand, two feet of clay. The liner is installed, and the two feet of sand will be placed later.
2. Cell No. 18 encountered nearly identical soil conditions as in Cell 16. We had very hard gray clays on the westerly end of the cell and sand on the upstream end of the cell. When we cut through the clay into the sand, some water was encountered. A four inch underdrain was installed up the longitudinal centerline of this cell and connected to the center north - south underdrain. Two feet of compacted clay was placed on top the entire length of the cell, including the westerly 2/3 of the cell which already had ten to fifteen feet of existing clay. The cell liner has been installed, and we are in the process of placing the two feet sand cover. Your attention is called to Sheet 19 of 28 of the as-built plans and the four inch monitoring well and water level at the east end of Cell 18.

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Mr. Fred Kellow  
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3. Cell 20 has been excavated and no water was encountered. The westerly 2/3 of this cell was a very hard clay with dry sand in the easterly portion. Two feet of clay has been placed in this cell, and the cell has been lined with the 20 mil PVC. Sand is presently being placed in this cell.

As I mentioned in our October 7th conversation, we desire to commence filling Cell 20 immediately because filling will allow a smooth, orderly transition through the winter period. I am enclosing a certification that work has been done in accordance with permit requirements and accepted engineering practices.

We have reviewed our correspondence and find that we have provided your office with all information requested, and that the only items remaining to be resolved on the Ten Mile Road site is our request regarding the use of 30 mil liners and less clay underlayment for 20 mil liners. We have also requested that the requirement for the east - west underdrain be deleted because our actual field experience and observation has revealed that the conditions anticipated did not develop, eliminating the need for the drain.

Respectfully,

KENT COUNTY DEPARTMENT OF PUBLIC WORKS

Robert H. Scott  
Assistant Director

RHS/sb  
Enclosure  
c.c. Win Ettesvold